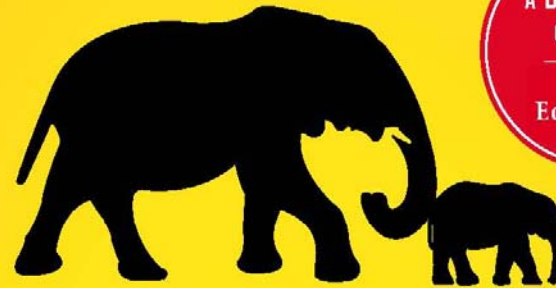


A NEW YORK TIMES Bestseller



# *Nudge*

Improving Decisions About  
Health, Wealth, and Happiness

Richard H. Thaler and Cass R. Sunstein

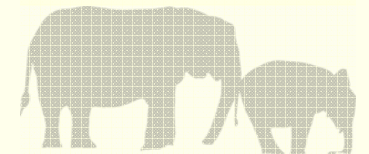
*Revised and Expanded Edition*

"One of the few books I've read recently that fundamentally changes the way I think about the world." —Steven D. Levitt, coauthor of *Freakonomics*



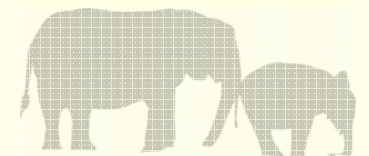
# Outline of Talk

- The essence of nudging
- New applications
- A behavioral economics take on the financial and oil spill crises



# Goals and Objectives

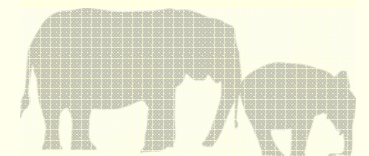
- Apply the techniques of the psychology of decision making and behavioral economics to improve decisions without limited choices.
- Offer an approach new approach to public policy that is neither left nor right.



# What is Behavioral Economics

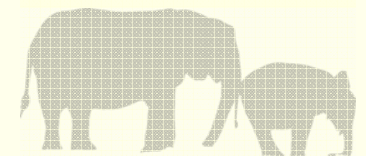
*“The phrase behavioral economics appears to be a pleonasm. What non-behavioral economics can we contrast with it? The answer to this question is found in the specific assumptions about human behavior that are made in neoclassical economic theory.”*

Herb Simon



# Assumptions of Behavioral Economics

- Humans vs. Econs
- Bounded Rationality
  - including bounded attention
- Bounded Willpower
- Bounded Self-interest
- Bounded Markets

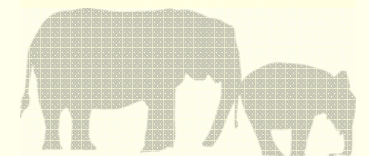


# One Approach to Policy: Libertarian Paternalism

Both terms are currently unpopular (at least in the US), and seemingly contradictory. But, neither concept should be controversial:

- *Libertarian*: protect the individual's right to choose
- *Paternalism*: do what you can to improve the welfare of people

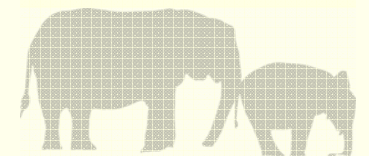
And it is possible to achieve these goals with better **choice architecture**.



# Choice Architecture

Anyone who designs the environment in which people make choices is a choice architect

- Menus
- Store layouts
- Government



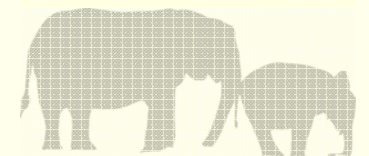
# What is the alternative?

Choice architects must choose *some* set of institutional arrangements. What design should planners pick?

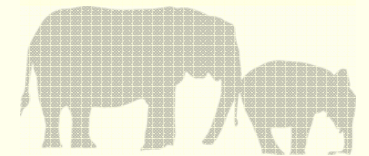
**Example:** cafeteria menu planning—in what manner (order, salience..) should the food be presented?

- The plan that make participants better off?
- The options that make the participants worse off? (e.g., fattest?)
- Random?
- The options that make the director best off?

Note that **some** choice has to be made.



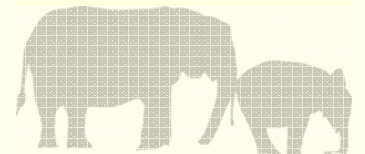
# Dutch Nudge



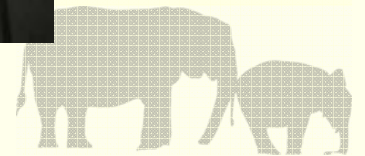
# Detail of Fly Painted on Urinal



Results: 80% less “spillage”

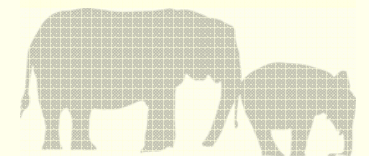


# World Cup Nudge

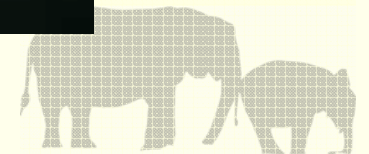


# Defaults as Nudges

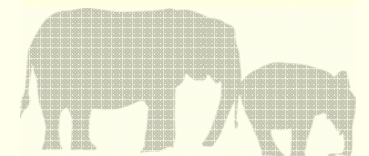
- Pension Automatic Enrollment
  - Changes the Default
  - Increases and speeds the participation rate
- Organ Donations Opt in vs. Presumed Consent
  - Upside—few opt out
  - Downside—more families object
  - Solution: Prompted choice.
  - Update: I-phone App.



# Media Campaigns



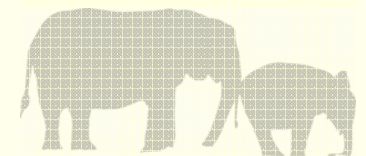
# Another Good Campaign



# RECAP:

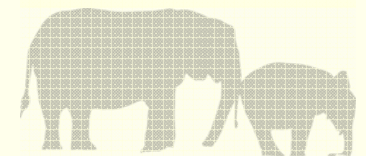
## Record, Evaluate and Compare Alternative Prices

- Electronic, downloadable information.
  - Price formulas
  - Personal usage information
- Applications
  - Credit Cards
  - Mortgages
  - Cell phones



# Example: Wireless Calling Plans

- Once a year (and any time there were rate changes) wireless plans would be required to send a file to every customer with price and usage data.
- Price data would include anything that can incur a charge, e.g., number and minutes of calls by time of day, to most frequent callers, downloads, texts, late fees, etc. Usage data would be the same.
- Users would upload this information to web sites (e.g., [billshrink.com](http://billshrink.com)) and/or sign up for the sites to monitor for updates.



## Your bill was successfully imported

Check out your personalized analysis below then click **view recommendations** to see if we've found ways to save you money or improve your service quality.

[View recommendations](#)

### Bill at-a-glance

Carrier:	<b>AT&amp;T</b>
Bill date:	<b>Apr 7, 2009</b>
# of lines:	<b>1</b>
Primary line:	650-555-0140
Account name:	Samir Kothari
Contract ends:	<b>May 22, 2009</b>

**Total minutes:** 1967

Anytime minutes: 957

M2M minutes: 475

Incoming minutes: 621

SMS: 56

MMS: 0

Data (mb): 82

**Bill total** **\$112.50**  
Excluding taxes

### Detailed analysis of your Voice calls

**Call patterns**

[Popular Contacts](#)

[Carriers](#)

[Daily](#)

[Weekly](#)

[Monthly](#)

What kind of patterns can you see in your calling?



#### Free calls

An estimated **51%** of your minutes were free (mobile-to-mobile or nights and weekends minutes)



#### Top caller

19% of your minutes are to or from T-Mobile # 650-555-0198



#### Top five

51% of your minutes are to or from five people



#### Top ten

65% of your minutes are to or from ten people



#### In 650

29% of your minutes are within your area code




#### In CA

79% of your minutes are within your state code



**T-Mobile**  
[myFaves 1000](#)  
[+ 1 add-on](#)

Price per month:  
**\$79.98**  
(excluding taxes & fees)

Signal quality  
  
[94025](#) [94063](#)  
[View map](#)

- 1000 anytime minutes
- Unlimited Nights (9pm-7am) & Weekends
- No mobile-to-mobile minutes
- Unlimited minutes to any 5 numbers
- Unlimited text messages
- 100 MB Data



**Savings over 2 years**  
**\$750** including all switching fees



Includes this free phone  
(26 others available)  
[Pick another phone](#)

[Get this plan](#)

▼ [How this is calculated?](#)

 ShrinkScore: 98

T-Mobile myFaves 1000

[View product page & reviews](#)

Savings Score

100



Signal Score

95



Overall fit

98

Costs & Savings

**Monthly items**

Your current monthly cost **\$120.00**

This plan's package cost **\$79.98**

Plan base cost \$59.99  
100 MB Web + Unlimited Messages for phones \$19.99

Monthly savings **\$40.02**

**One-time switching fees**

Activation Fees **\$35.00**


Early Termination Fee **\$175.00**


**First year savings \$270**

**Second year savings \$480**

T-Mobile signal quality

**Signal Quality**

 **Home (94025)**  
Very Good

 **Work (94063)**  
Very Good

Commute score

71

[See map](#)

Personalized fit

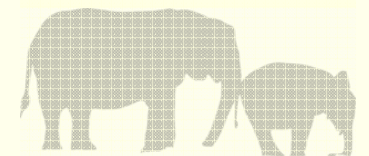
**Anytime minutes 1000 included**, you only need 728 [why?](#)

**Text messages Unlimited included**, you only need 10000

**Data 100 MB included**, you only need 100 MB

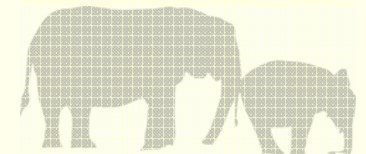
# Credit Cards

- Credit cards should get similar treatment. Prices and usage in machine readable form.
- The recent release by the Fed of text files of pricing policies by mobile calling providers by the Fed is not a good substitute.



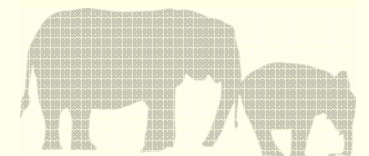
# Advantages of this approach

- Disclosure is an alternative to the continuing battle to regulate credit pricing terms that turns into a game of whack-a-mole.
  - In Australia where rates charged to merchants were regulated, new fees are emerging.
- Disclosure allows for innovation since it does not forbid new financial products.



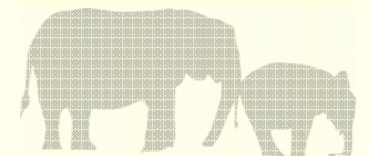
# Many other applications possible

- The Bay Area Rapid Transit System (BART) released "open format data" to third party developers and now there are smart phone apps that will tell you when the next train will arrive. Other cities are following suit. This costs the government virtually nothing. The private sector becomes the information provider.



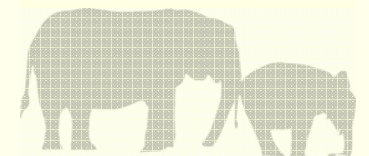
# Recipe for Disasters

- Three ingredients from the financial crisis:
  - Rare events ("Black Swans")
  - Complex technologies
  - Counterparty conflicts of interest



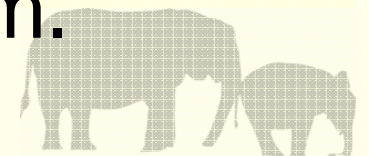
# Black Swans

- We keep observing things that "cannot happen".
  - October 19, 1987
  - Long Term Capital Management
  - Internet Bubble
  - Quant hedge fund mini-crisis August 2007
  - Financial Crisis 2008-?
- At what point do we decide we have the wrong model?



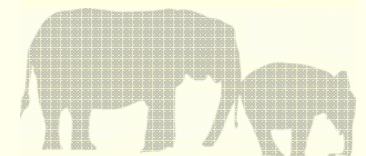
# Black Boxes

- Calvin Trillin Hypothesis: "The financial system nearly collapsed because smart guys had started working on Wall Street".
- "Hot traders". Since Nick Leeson, who destroyed Barings, we have seen firms unable to distinguish luck from skill.
- Bob Rubin, co-chair of Citigroup, said he had never heard of the term "liquidity put" until the firm lost \$50 billion on them.



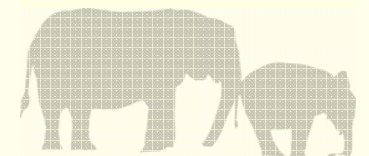
# Counterparty Risk

- “Those of us who have looked to the self-interest of lending institutions to protect shareholder’s equity (myself especially) are in a state of shocked disbelief. Such counterparty surveillance is a central pillar of our financial markets’ state of balance. If it fails, as occurred this year, market stability is undermined.” Alan Greenspan



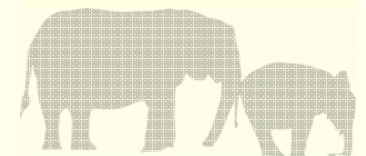
# Conflicts of Interest

- The charges against Goldman Sachs are just one example of the potential conflicts among banks, investors, hedge funds, and rating agencies.



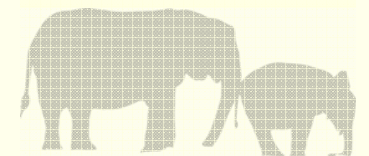
# Oil Spill Black Swans

- John Hayward, BP CEO "This was a one-in-a-million chance"
- But similar event 30 years ago in the Gulf
- Many accidents are caused by events not even considered. Howard Raiffa.



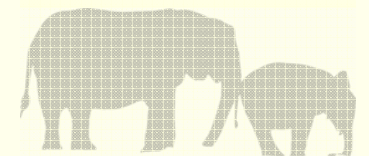
# Human Error Discounted

- Scott Fisher, one of the guides who died on Mt. Everest. *Into Thin Air*.
- "I believe 100% I am coming back...My wife believes 100% that I am coming back. She isn't concerned about me at all when I'm guiding because I'm gonna make all the right choices. When accidents happen, I think it is always human error. So that is what I want to eliminate."



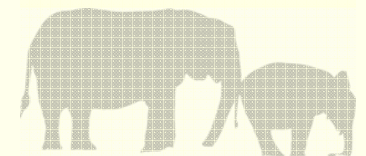
# Complexity

- A Coast Guard inspector at a Congressional hearing “The pace of technology has definitely outrun the regulations.”
- Fact about SEC professionals
  - 1400 lawyers
  - 25 Ph.D.'s in economics/finance



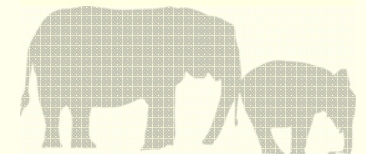
# Counterparty Conflicts of Interest

- Deepwater Horizon was a joint effort among BP, Transocean and Halliburton.
- “Of the 126 people present on the day of the explosion, only eight were employees of BP. The interests of the workers did not always align.
- Sound familiar?



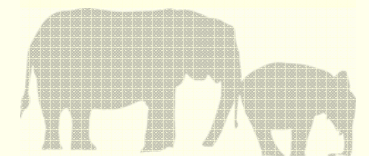
# Solutions?

- One trap is to conclude that we need to give lots of power to regulators.
- But if the CEOs of these companies did not understand what was going on, what hope is there for regulators?
- One goal: improve disclosure enough to impose market discipline while still allowing companies to make money.
- In some cases, disclosure to outsiders will improve disclosure inside the firm.



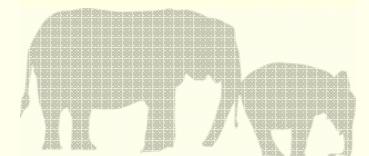
# Risk Taxes

- Tax banks who impose systematic risk and drillers who impose environmental risk.
- How to measure the risk?
- One possible approach: require risk takers to carry insurance with large deductibles.
- Question: is the insurance industry up to the job?



# Conclusions

- Our world is getting increasingly complex.
- Neither the private sector nor the public sector are keeping up with the changes in technology and complexity.
- We need rules that do not require anyone (managers, regulators or customers) to get smarter).
- Rule #1. Start with (electronic) disclosure.



Dagelijks nemen wij talloze beslissingen, maar helaas blijken veel van onze keuzes achteraf verkeerd uit te pakken. Thaler en Sunstein stellen dat dat komt doordat wij ons — menselijk als we zijn — laten leiden door vooroordelen. Helaas betalen wij voor onze blunders op het gebied van onderwijs, geld, familie, en zelfs onze hele planeet, een hoge prijs: onze welvaart en gezondheid.

De auteurs laten zien hoe wij mensen in onze directe omgeving, in de samenleving of op het werk een zetje in de goede richting kunnen geven. We kunnen hen met zachte hand — met een *nudge* — naar betere keuzes leiden, zonder hen te beperken in hun keuzevrijheid. Denk aan schoolkantines en bedrijfscafeteria die alleen gezonde voeding aanbieden of bedrijfsplannen voor het stimuleren van thuiswerken. *Nudge* is een van de meest maatschappelijk betrokken en provocerende boeken van de laatste jaren.

*Richard Thaler en Cass Sunstein bekleden beiden een leerstoel aan de universiteit van Chicago op het gebied van respectievelijk gedragswetenschappen en economie, en politieke wetenschappen en jurisprudentie. Thaler is ook als onderzoeker verbonden aan het National Bureau of Economic Research in de Verenigde Staten.*

*Dit is een van de weinige boeken die mijn blik op de wereld fundamenteel heeft veranderd. Verrassend genoeg is het ook een genot om te lezen. Het is ongekend dat academici zo goed en leesbaar schrijven.*

— Steven Levitt, co-auteur van *Freakonomics*

*Dit is een must-read voor iedereen die zowel zijn eigen denkproces als de samenleving wil verbeteren. Je beslissingen gaan erop vooruit, en de wereld wordt er een stukje mooier van.*

— Daniel Kahneman, Nobelprijswinnaar economie

#### Business Contact



[www.businesscontact.nl](http://www.businesscontact.nl)

NUDGE RICHARD THALER & CASS SUNSTEIN

RICHARD THALER & CASS SUNSTEIN

# NUDGE

*Naar betere beslissingen over gezondheid, geluk en welvaart*

**Nudge** [nʌdʒ] por ⇒  
stoot(je), duwtje in de  
goede richting



Business Contact

